

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A receiver ~~Receiver~~ for processing a received signal (SEQ), said receiver being multimode, comprising ~~characterized in that it comprises:~~ a single RF chip for processing the received signal (SEQ) in any mode, said chip comprising a spreading section (SPREAD_SEC) for spreading and down-converting to baseband the ~~the~~ [[a]] received signal (SEQ) and a channel filtering section (CH_SEC) for DC offsets rejection on the ~~the~~ [[a]] received signal (SEQ), and a single baseband chip [[BB]] comprising despreading means (DSPR) for despreading a spread signal (SEQ).

2. (currently amended) The receiver ~~Receiver~~ for processing a received signal (SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the spreading section (SPREAD_SEC) is adapted to produce a spread spectrum oscillator [[LO]] and a spreading sequence [[PN]], in order to expand the bandwidth of a received signal (SEQ).

3. (currently amended) The receiver ~~Receiver~~ for processing a received signal (SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the spreading section (SPREAD_SEC) further comprises unique rejection means (LPF3) for all the modes for suppressing the adjacent carrier frequencies of the associated received signals (SEQ).

4. (currently amended) The receiver ~~Receiver for processing a received signal~~
(SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the channel filtering
section (CH_SEC) is common for all the modes.

5. (currently amended) The receiver ~~Receiver for processing a received signal~~
(SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the channel filtering
section (CH_SEC) comprises: a block of low-noise amplifier (LNA) and
associated mixers (M1&M2) for each mode, and unique first rejection means
(HPF1) for rejecting DC offsets on a spread received signal (SEQ) for any mode.

6. (currently amended) The receiver ~~Receiver for processing a received signal~~
(SEQ) as claimed in claim 5, wherein ~~characterized in that~~ the channel filtering
section (CH_SEC) further comprises adding means (ADD1,ADD2) for redirecting
a spread received signal (SEQ) coming from a block of low-noise amplifier (LNA)
and associated mixers (M1&M2) to the first rejection means (HPF1).

7. (currently amended) The receiver ~~Receiver for processing a received signal~~
(SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the baseband chip
(BB_INT) further comprises: channel filter coefficient banks (FIR) with associated
filters (BB_LPF) for each mode for rejecting adjacent carrier frequencies on the
associated spread received signal (SEQ), and a matching filter (HR) for
producing the same distortion of a spread signal (SEQ) on a corresponding
despreading sequence [(PN)].

8. (currently amended) The receiver ~~Receiver for processing a received signal~~ (SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the despreading means (DSPR) comprise: a single multiplier [(M)], and a single correlator with integration and dump means (I&D).

9. (currently amended) The receiver ~~Receiver for processing a received signal~~ (SEQ) as claimed in claim 1, wherein ~~characterized in that~~ the baseband chip (BB_INT) further comprises synchronization means (SYNC) for synchronizing a spread signal (SEQ) with a corresponding despreading sequence [(PN)].

10. (currently amended) A method for receiving a signal (SEQ) in any mode, comprising ~~characterized in that it comprises the steps of:~~ spreading and down-converting the received signal (SEQ) to baseband, rejecting the DC offsets on the received signal (SEQ), and despreading the spread signal (SEQ).

11. (currently amended) The [(A)] method for receiving a signal (SEQ) as claimed in claim 10, further comprising ~~characterized in that it comprises also a step of~~ producing a spread spectrum oscillator [(LO)] and a spreading sequence [(PN)] in order to expand the bandwidth of the received signal (SEQ).

12. (currently amended) A mobile ~~Mobile~~ phone comprising a receiver as claimed in claim 1.